

JOERGER ENTERPRISES, INC.

MODEL VS

NIM, DUAL CHANNEL 150MHZ VISUAL SCALER

FEATURES:

- HIGH COUNTING SPEED, 150MHZ MIN.
- EASY READING LED DISPLAYS
- INTERNAL TEST FEATURES
- LOW POWER CONSUMPTION

The Joerger Enterprises Inc. Model VS is a high speed scaler packaged in a double width NIM module. It contains two identical eight digit counters. Visual readout is provided on two eight digit LED displays. Character height is .375 inches and leading zero suppression is incorporated thus providing a very readable display. A gate light and overflow light are provided for each channel. Testing features are provided to test the displays (display all 8's) and also to test the counters. The counters are tested by switching on an internal test oscillator which injects a test signal into each channel. When the test oscillator is switched off the two channels should track within ± 1 count verifying correct operation. This test input is inserted after the counting gate so that the module may be tested in the presence of external inputs simply by gating off the scaler. A three position gate switch is provided to "Enable", "Disable", or allow the channel to be remotely gated by an external gate signal. Reset is accomplished either manually or externally, a carry output signal is provided for each channel.

SPECIFICATIONS

(Identical for each channel)

INPUTS

Signal

Impedance	50 ohms $\pm 10\%$ D.C. coupled
Pulse Repetition Rate	0-150MHZ min.
Pulse Pair Resolution	Less than 7nsec
Sensitivity	-500mv
Pulse Width	3nsec min.

Gate (bridged high impedance NIM input)

Impedance	5K ohms min.
Sensitivity	-500mv to gate channel off
Response Time	Less than 10ns

Reset (bridged TTL input, biased to logic "0", +2.5v min.)

Amplitude	Logic "1", .5v max.
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OUTPUTS

Carry Out (note carry out is inhibited during reset)
Amplitude -700mv min., into 50 ohms
Pulse Width 250nsec typical

DISPLAYS

Data Displayed on eight .375 LED displays with leading zero suppression.

Gate An LED is provided to indicate when the counting gate is open.

Overflow An LED is provided to indicate when that channel has overflowed.

MANUAL CONTROLS

Gate A three position switch is provided to open (enable), close (disable), or allow gating from an external input (remote).

Reset A pushbutton is provided to reset each channel. This switch is also used to test the display. When the switch is depressed all eights will appear on the display.

Test A test switch is provided that injects test signals into each channel after the counting gate. Both channels should track during test within +1 count.

POWER REQUIREMENTS

+6v 200ma reset condition
600ma both displays all eights, test mode
-6v 480ma
+12v 285ma

SIZE

#2 NIM module

TEMPERATURE RANGE

0°C to 50°C

JEI0487